



APICAL INDUSTRIES, INC.  
dba DART AEROSPACE

TRANSACTION CODES (TC):  
A-ADD C-CREATE  
R-REVISE D-DELETE

ENGINEERING CHANGE NOTICE NO.

05409

SHEET 1 OF 3

DWG NO. 647.2100

REV: C

PREPARED  
BY

J. BECKER

DATE: 06/07/16

EFFECT ON DWG

☐ INC. ☒ UNINC.

DWG TITLE: MOUNTING RAIL

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

REASON: REVISED DIMENSIONS AND ADDED NOTE.

ECR:

N/A

ACTION ITEM:

1.

### SHEET 1, NOTES ARE:

NOTES:

1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12

2 FINISH IAW MPP-172, SECTION 3.3 & 4.3; 1-2 MIL MAX

3 DEBURR AND BREAK ALL SHARP EDGES

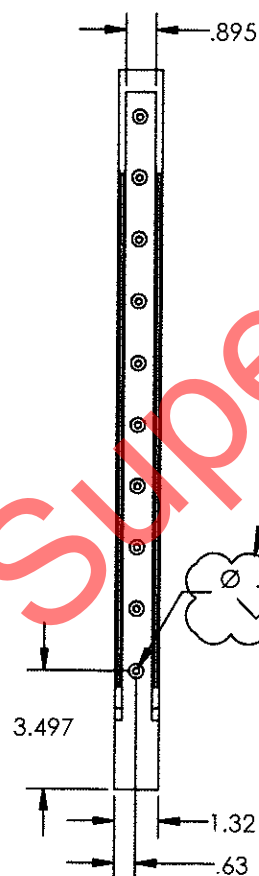
4 IDENTIFY IAW MPP-120.

5 HOLE LOCATIONS CONTROLLED BY 647.2110.

6 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL  
P/N 647.2114, LAST SAVED 02/29/16.

7 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL  
P/N 647.2112.

### SHEET 3, ZONE C3 IS:

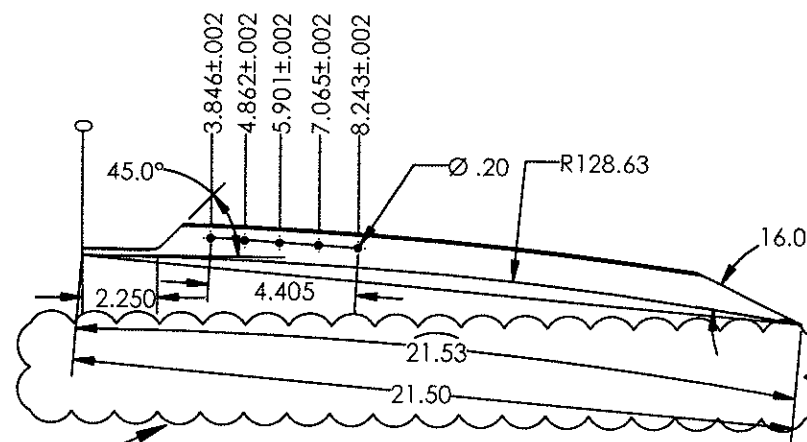


Ø .201 THRU 10 PL  
✓ .439 X 100°

IS

IS

### SHEET 3, ZONE D6 IS:



DOCUMENTS EFFECTED:

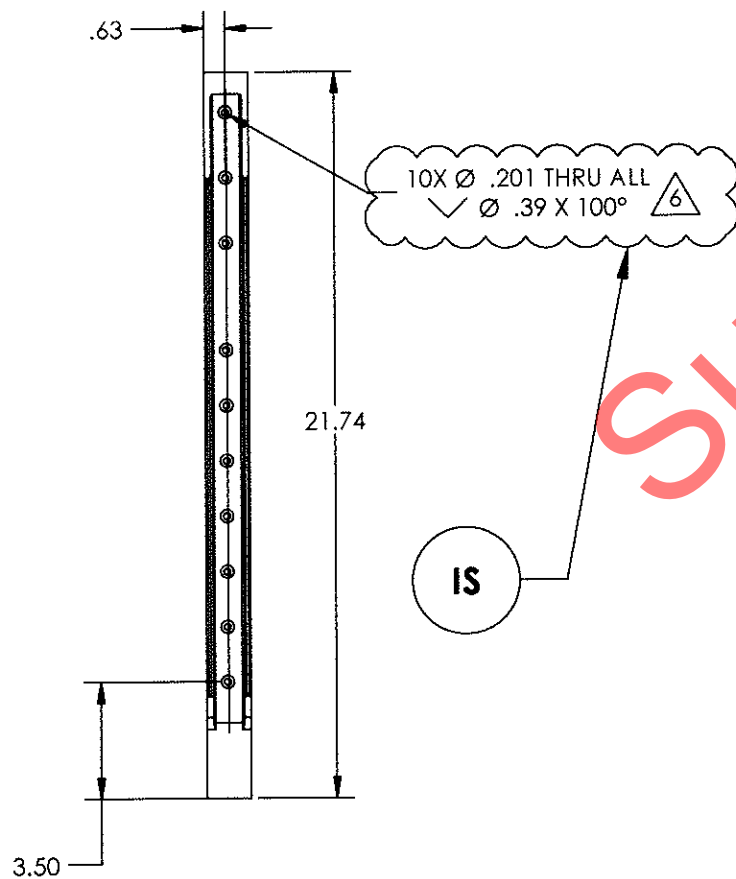
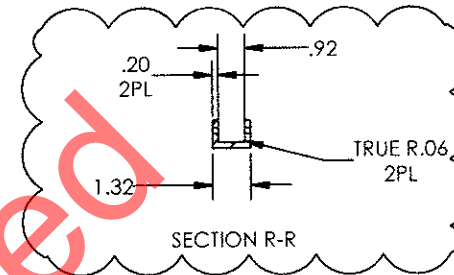
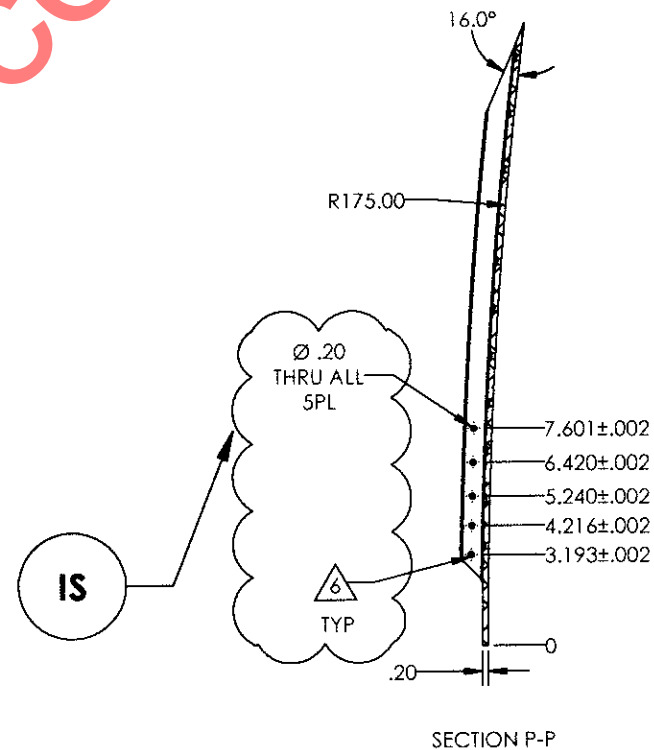
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

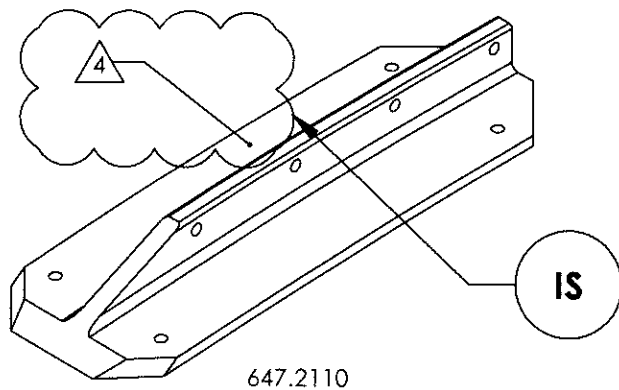
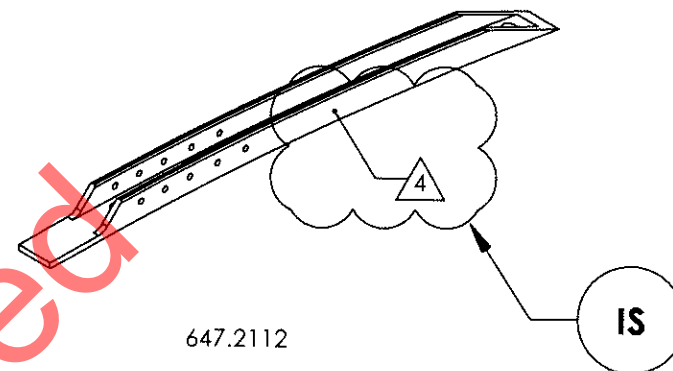
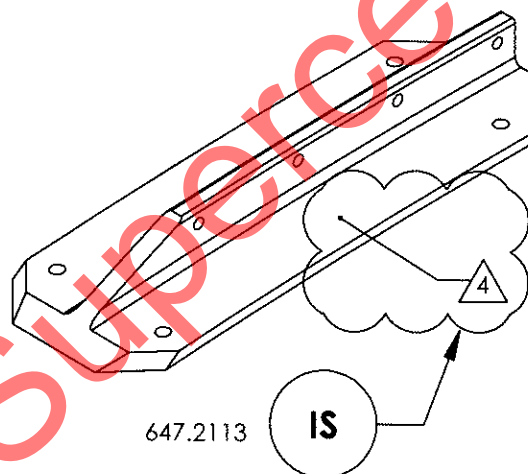
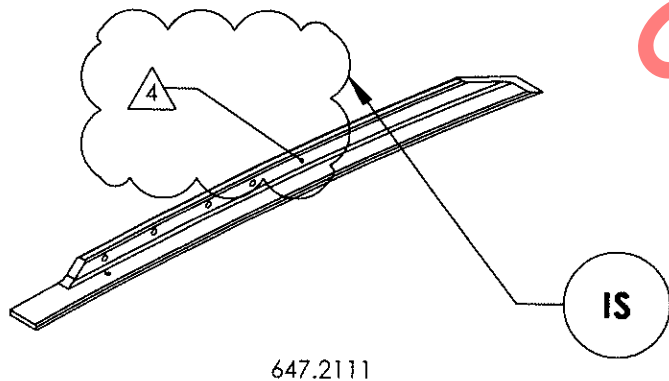
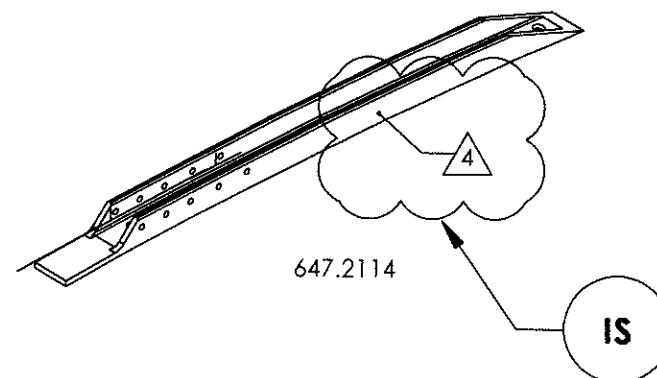
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

**SHEET 5, ZONE B3 IS:****SHEET 5, ZONE A4 IS:****SHEET 5, ZONE C4 IS:**

**SHEET 1, ZONE A5 IS:****SHEET 3, ZONE A7 IS:****SHEET 4, ZONE A7 IS:****SHEET 2, ZONE A7 IS:****SHEET 5, ZONE A7 IS:**



APICAL INDUSTRIES, INC.  
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

05368

SHEET 1 OF 1

DWG NO. 647.2100

REV: C

PREPARED BY J. BECKER

DATE: 03/31/16

EFFECT ON DWG  
☐ INC. ☒ UNINC.

DWG TITLE: MOUNTING CHANNEL

APPROVED BY:

ENGR

MFG

QC

EFF. NEXT ORDER

TRANSACTION CODES (TC):  
A-ADD C-CREATE  
R-REVISE D-DELETE

REASON: REVISED FINISH TO INCLUDE ANODIZE.

ECR:  
N/A

ACTION ITEM:  
1.

### SHEET 1, ZONE C5 IS:

#### NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH IAW MPP-172, SECTION 2.1, 3.3 & 4.3; 1-2 MIL MAX
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120.
- 5 HOLE LOCATIONS CONTROLLED BY 647.2110.
- 6 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL  
P/N 647.2114, LAST SAVED 02/29/16.

IS

DOCUMENTS EFFECTED:

☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: PP2		N/C
NC	INITIAL RELEASE	06/05/09	P. BRAVO
A	INCORPORATED ECN 02695, 02961, 03920	06/07/13	P. BRAVO
B	INCORPORATED ECN 03956	07/01/13	P. BRAVO
C	INCORPORATED ECN 05326	02/26/16	P. BRAVO

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH IAW MPP-172, SECTION 3.3 & 4.3; 1-2 MIL MAX
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120.
- 5 HOLE LOCATIONS CONTROLLED BY 647.2110.
- 6 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL P/N 647.2114, LAST SAVED 02/29/16.

UNINCORPORATED ECN(S)

05368, 05409

A

B

C

D

SECTION A-A

SECTION B-B

			5	647.2114	UPPER U CHANNEL	△	△
			4	647.2113	LOWER RAIL	△	△
			3	647.2112	UPPER U CHANNEL	△	△
			2	647.2111	UPPER RAIL	△	△
			1	647.2110	LOWER RAIL	△	△
			FIND #	PART #	DESCRIPTION	MAT'L	SPEC.
QTY		PARTS LIST					
NEXT ASSY (S)		ORIGINAL DATE (MO-DA-YR)		06/05/09			
645.1700, 647.1300		DRAWN BY S. HUFF		CHECKER P. BRAVO			
		DRAWING APPROVAL P. BRAVO		06/05/09			
		CONTRACT No.					
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°					
		DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300					
		MOUNTING RAIL					
		SIZE B	CAGE CODE 07MZ6	DWG. NO. 647.2100		REV. C	
		SCALE NONE				SHEET 1 OF 5	

1 2 3 4 5 6 7 8

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A

B

C

D

.63

C

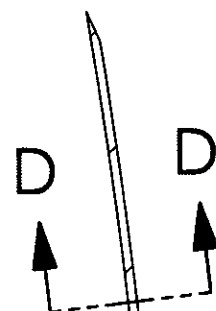
C

Ø.156 THRU

1.13

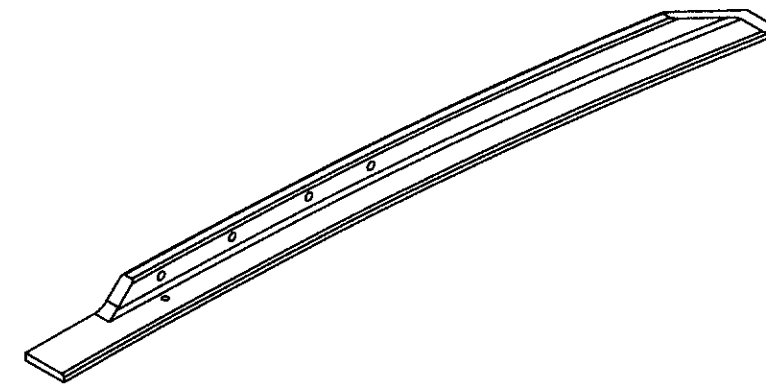
.340<sup>+0.000</sup>  
-.002

R.06  
3 PL  
R.10  
SECTION D-D

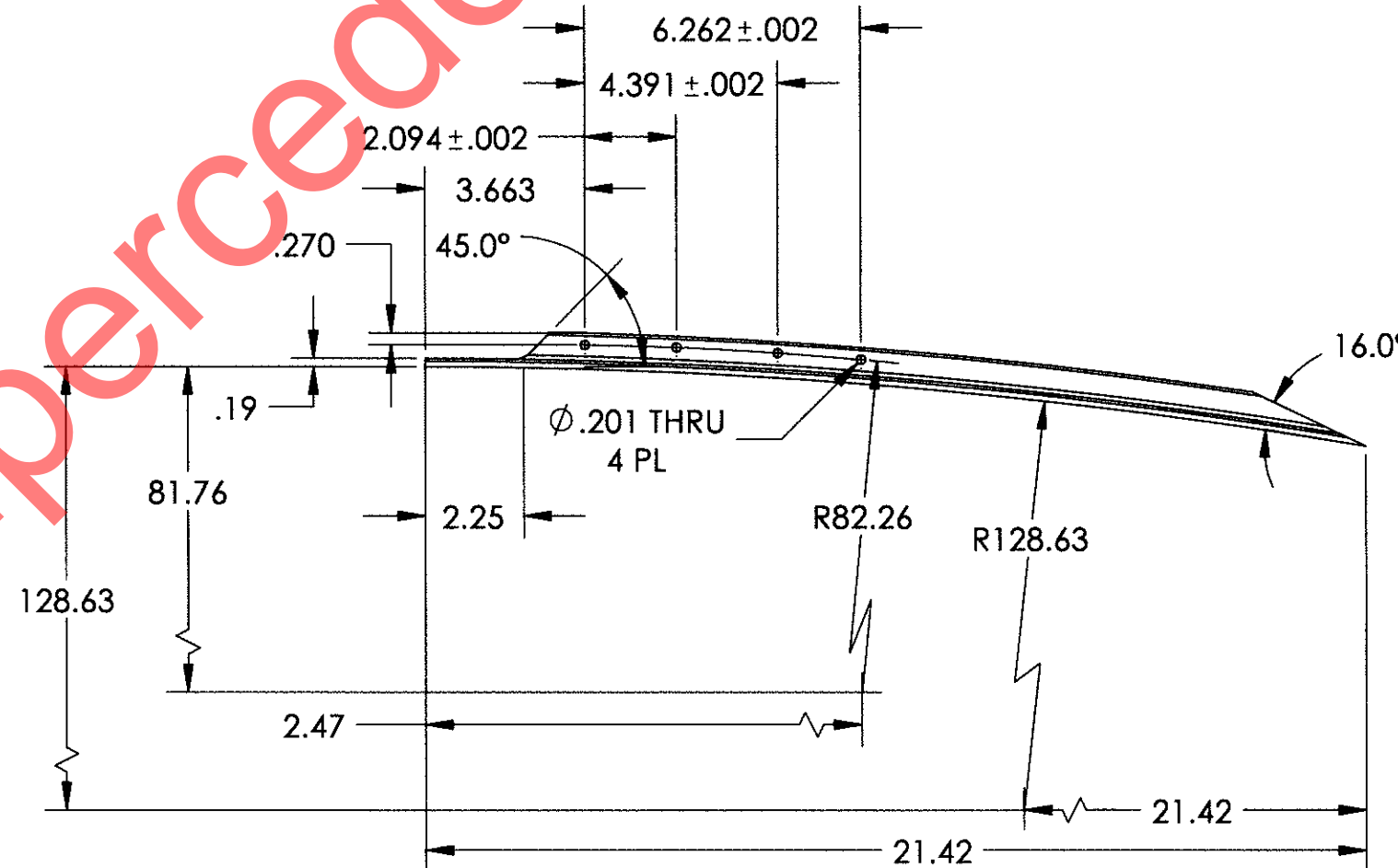


3.50  
1.6°

SECTION C-C



647.2111



ORIGINAL DATE 08/05/09  
DRAWN BY S. HUFF  
CHECKER P. BRAVO  
DRAWING APPROVAL P. BRAVO  
08/05/09  
CONTRACT No.

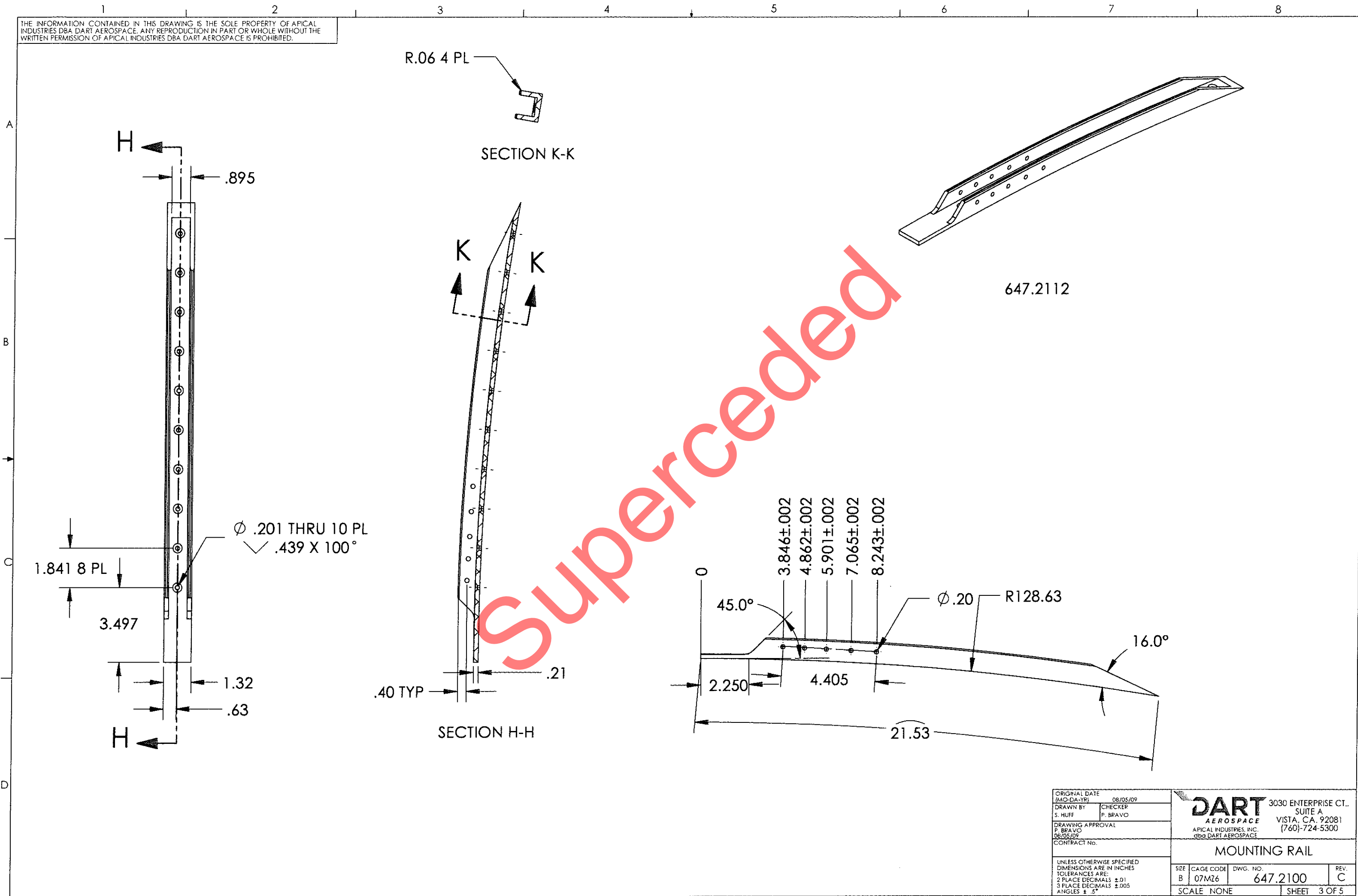
UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
2 PLACE DECIMALS ±.01  
3 PLACE DECIMALS ±.005  
ANGLES ±.5°

**DART** 3030 ENTERPRISE CT.,  
AEROSPACE SUITE A  
VISTA, CA. 92081  
APICAL INDUSTRIES, INC. (760)-724-5300  
dba DART AEROSPACE

MOUNTING RAIL

SIZE B	CAGE CODE 07MZ6	DWG. NO. 647.2100	REV. C
SCALE NONE			SHEET 2 OF 5

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ORIGINAL DATE (MO-DA-YR) 08/05/09		DRAWN BY S. HUFF		CHECKER P. BRAVO	
DRAWING APPROVAL P. BRAVO 08/05/09		CONTRACT No.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$	
SIZE B		CAGE CODE 07M26		DWG. NO. 647.2100	
SCALE NONE		SHEET 3 OF 5		REV. C	

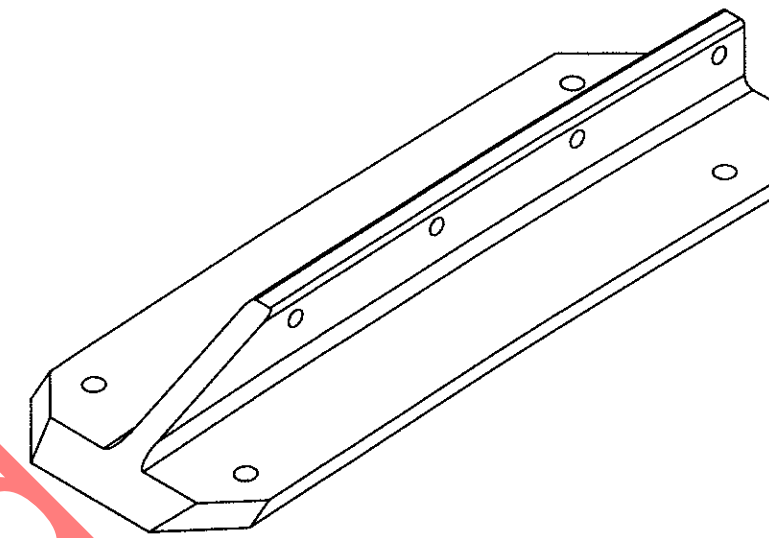
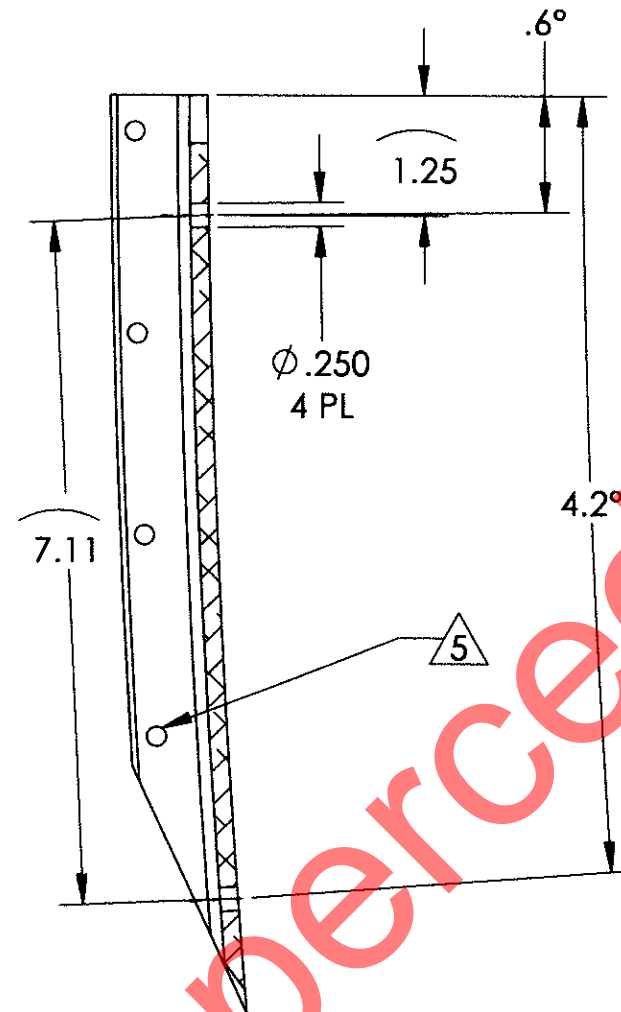
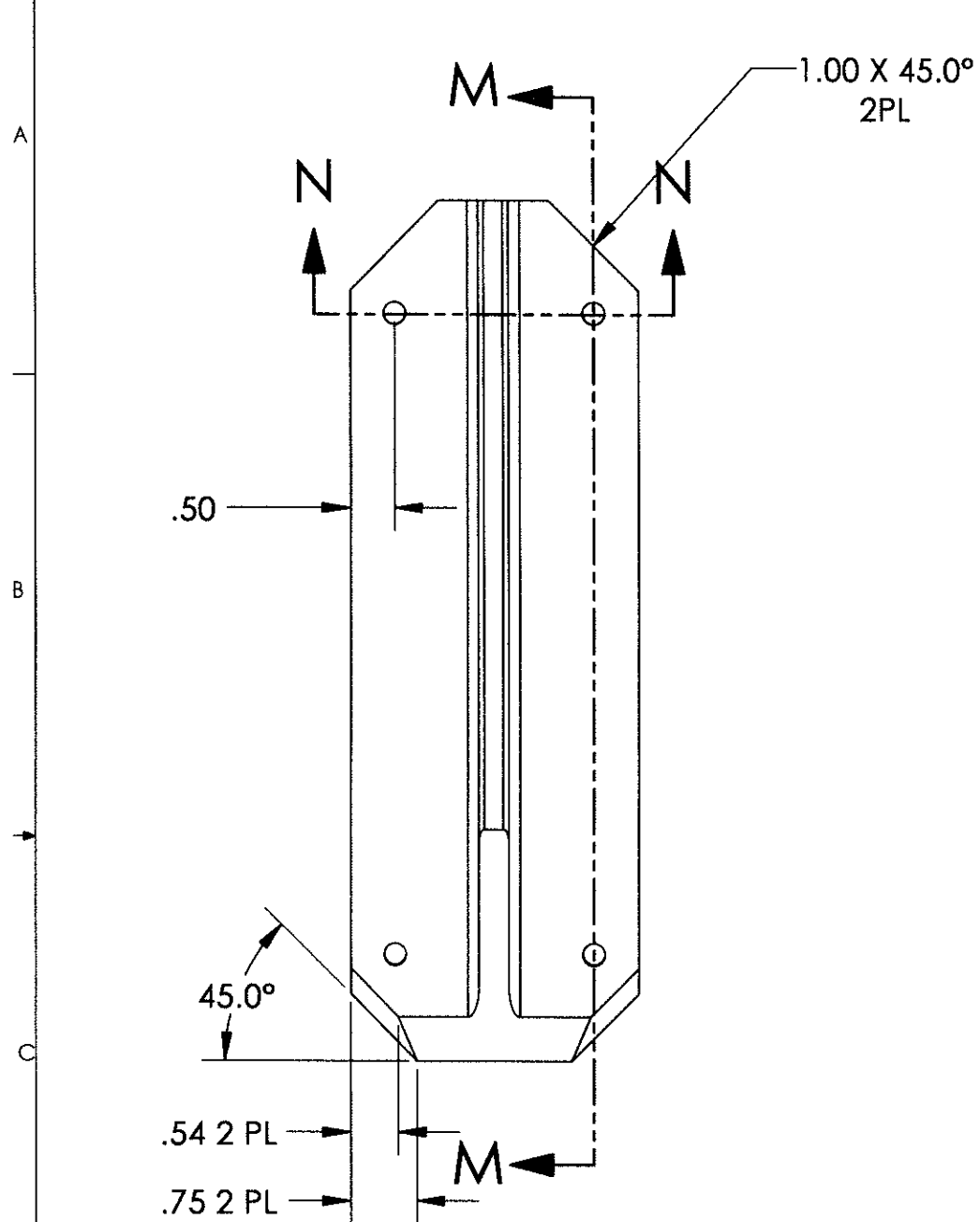
**DART**  
AEROSPACE

3030 ENTERPRISE CT.,  
SUITE A  
VISTA, CA. 92081  
(760)-724-5300  
dba DART AEROSPACE

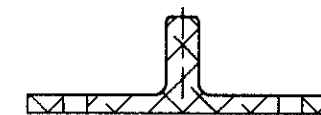
**MOUNTING RAIL**



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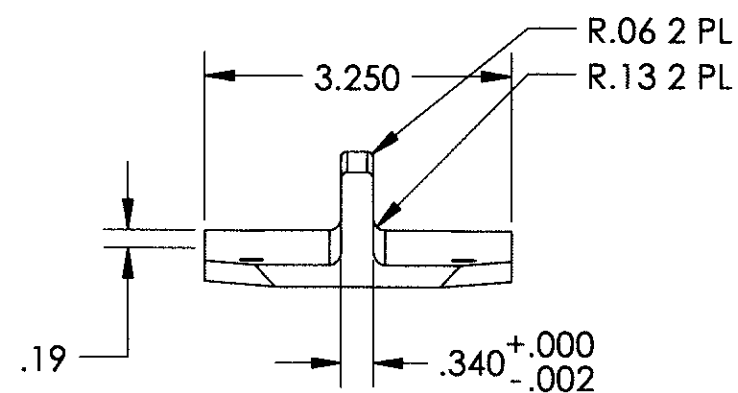


647.2113



SECTION N-N

SECTION M-M



ORIGINAL DATE (MO-DA-YR) 08/05/09	DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300		
DRAWN BY S. HUFF	CHECKER P. BRAVO	DRAWING APPROVAL P. BRAVO 08/05/09	
CONTRACT No.		MOUNTING RAIL	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B	REV. C
CAGE CODE 07MZ6		DWG. NO. 647.2100	SHEET 4 OF 5
SCALE NONE			



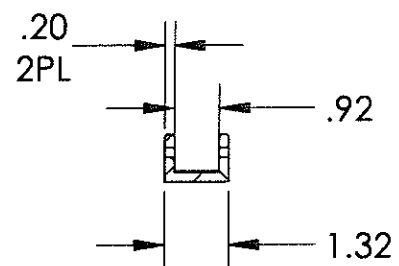
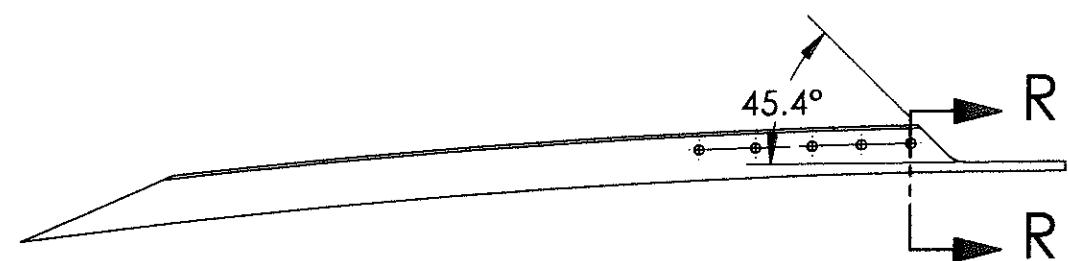
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A

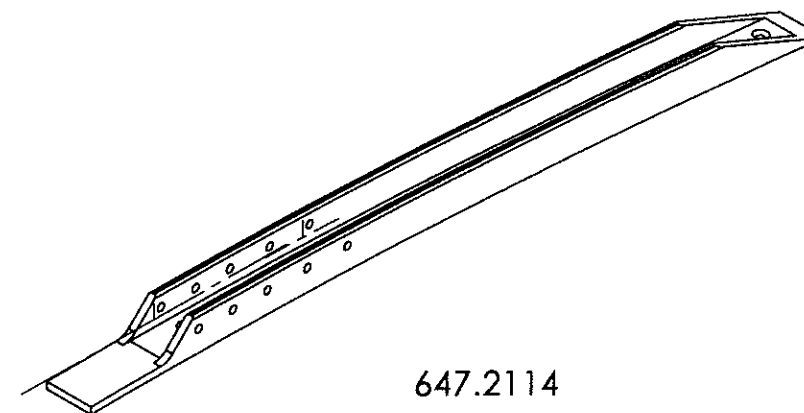
B

C

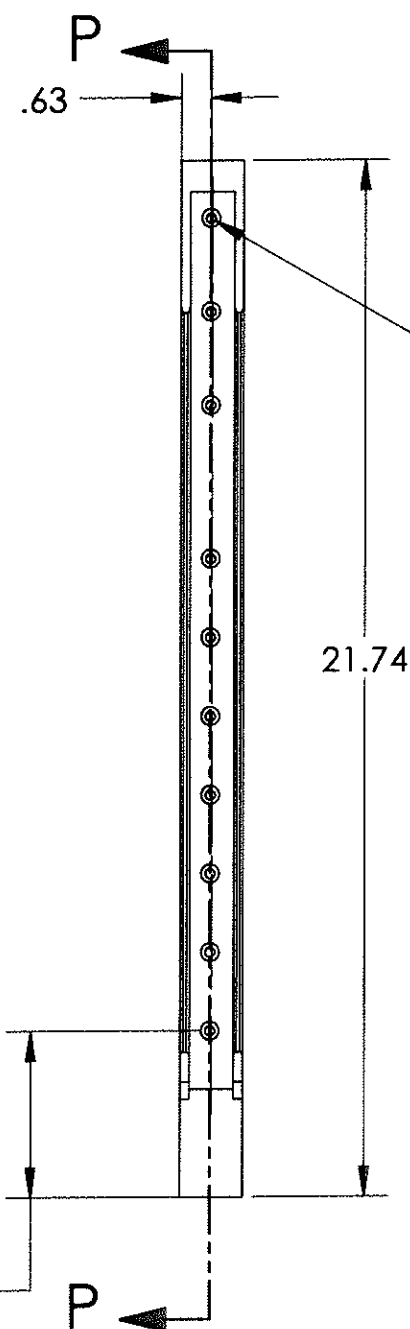
D



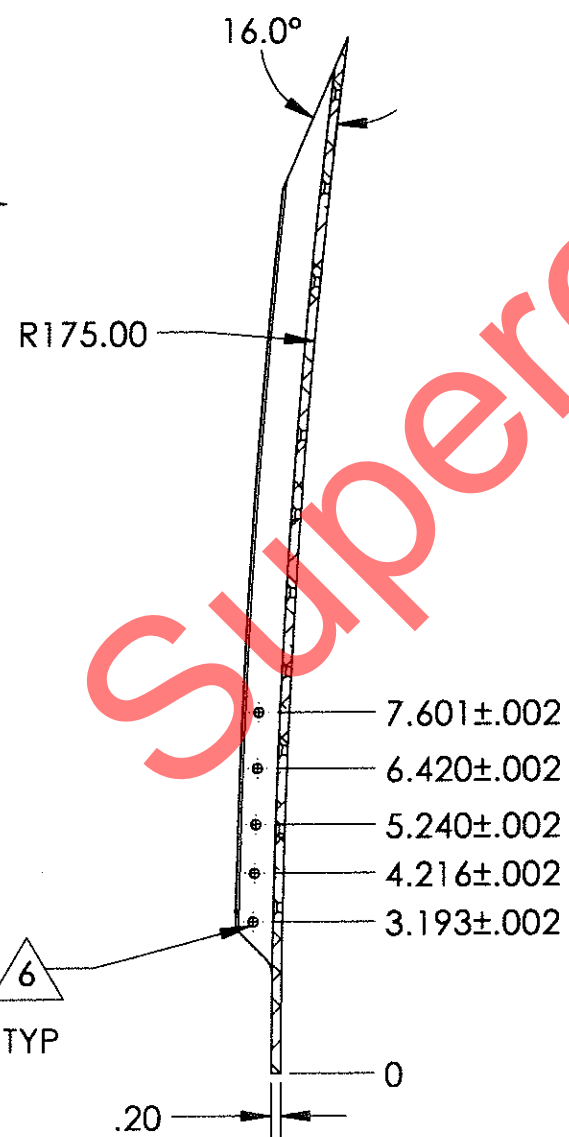
SECTION R-R



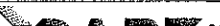
647.2114



10X  $\phi$  .201 THRU ALL  
 $\angle \phi$  .39 X 100°



SECTION P-P

ORIGINAL DATE (MO-DA-YR) 08/05/09	3030 ENTERPRISE CT. SUITE A VISTA, CA. 92081 (760)-724-5300		
DRAWN BY S. HUFF	CHECKER P. BRAVO	 APICAL INDUSTRIES, INC. dba DART AEROSPACE	
DRAWING APPROVAL P. BRAVO 08/05/09	MOUNTING RAIL		
CONTRACT NO.	SIZE B	CAGE CODE 07MZ6	REV. C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ± 5°	DWG. NO. 647.2100		SHEET 5 OF 5
SCALE NONE			